

NAVAL SAFETY CENTER
NAVAL AIR STATION
NORFOLK, VIRGINIA 23511

14/hl
Ser 701
19 June 1968

SPECIAL HANDLING REQUIRED IAW OPNAVINST 3750.6 SERIES
[REDACTED]

From: Commander, Naval Safety Center
To: Commanding Officer, Training Squadron THREE

Subj: VT-3 AAR ser 4-68A concerning T-28B BuNo 138348 accident occurring
10 March 1968, pilot HARRIS

1. The subject report and all endorsements thereon have been reviewed. Commander, Naval Safety Center concurs with the comments and recommendations of the Aircraft Accident Board and subsequent endorsers.

(b) (5)
[REDACTED]

(b) (6)
[REDACTED]

By direction

Copy to:
NAVAIRSYSCOMHQ (AIR-09E) (2)
CNATRA
CNABATRA
NAVPLANTREPO COLUMBUS
DIR AFIP

[REDACTED]

Code 015

1 8 APR 1968

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

THIRD ENDORSEMENT on CO, VT-3, accident, Ser 4-68A, concerning T-28B,
BUNO 138348, of 10 Mar 1968, pilot HARRIS

From: Chief of Naval Air Training
To: Commander, Naval Aviation Safety Center

Subj: Aircraft accident report; forwarding of

1. Forwarded, concurring in the conclusions and recommendations of the
Aircraft Accident Board and comments and action indicated by the Command-
ing Officer, Training Squadron THREE.

F. J. Moore, Jr.

F. J. MOORE, Jr.
Chief of Staff

Copy to:
CNABATRA
COMNAVAIRSYSCOM (AIR 404)
NAVAIRSYSCOM, NAVPLANTREPO, Columbus
CO, TRARON THREE
DIR, AFIP

Code 015
11 APR 1966

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6
SERIES

SECOND ENDORSEMENT on TRARON THREE, accident, serial 4-68A,
concerning T-28B, BuNo 138348, of 10 March 1968, pilot HARRIS

From: Chief of Naval Air Basic Training
To: Commander, Naval Aviation Safety Center
Via: Chief of Naval Air Training

Subj: Aircraft Accident Report; forwarding of

1. Forwarded, concurring in the conclusions and recommenda-
tions of the Aircraft Accident Board and with the comments and
corrective action indicated in the first endorsement.

Copy to:
NAVAVNSAFCE (2 direct)
NAVAIRSYSCOM (AIR 404)
NAVPLANTREPO COLUMBUS
TRARON THREE



D. H. GUINN

4 APR 1968

FIRST ENDORSEMENT on Training Squadron THREE Serial 4-68A Concerning
T-28B, BuNo, 138348, Accident Occurring 10 March 1968.
Pilot HARRIS.

From: Commanding Officer, Training Squadron THREE
To: Commander Naval Aviation Safety Center
Via: (1) Chief of Naval Air Basic Training
(2) Chief of Naval Air Training

Subj: Aircraft Accident Report; forwarding of

1. Forwarded concurring with the conclusions and recommendations of
the Aircraft Accident Board subject to the following comments.

(b) (5)

(b) (5)



L. E. Brumbach
L. E. BRUMBACH

Copy to:
NAVAVSAPCEN (2cc)
NAVAIRSYSCOM (AIR 404)
CNATRA
CNABATRA
NAVPLANTREP - COLUMBUS

PART 1 GENERAL					
1. AIRCRAFT ACCIDENT BOARD APPOINTED BY CO, TRARON THREE	2. SERIAL NO 4-68A	3. DTG (LOCAL) OF MISHAP 101830SMAH	4. MODEL AIRCRAFT T-28B	5. BUREAU NUMBER 138348	
6. TO: Commander, Naval Aviation Safety Center	7. VIA CO, TRARON THREE	8. 9. LOCATION OF MISHAP 120/4 MI NAAS WHITING	10. DAMAGE ALEA	11. TIME OF DAY DUSK	12. TIME IN FLIGHT 3+06
13. FLIGHT CODE IDI	14. CLEARED FROM POPE AFB	15. TYPE CLEARANCE VFR	16. AIRSPEED 187 230 KTS	17. A/C WEIGHT 7836/19.3	
18. BRIEF DESCRIPTION OF MISHAP AIRCRAFT CONTACTED CONDITIONS	19. ELEVATION AT TIME OF MISHAP SL 150	20. LIST MODEL (BUND REPORTING CUSTODIAN AND DAMAGE CLASSIFICATION OF ANY OTHER A/C INVOLVED)	21. TERRAIN 0		

(b) (5)

HARRIS, NICHOLAS		LTJG		(b) (6)		1315		JUN 61 YR INST		R/C	
CO-PILOT (Identify & submit separate page 1)											
SECTION C. PERSONNEL DATA											
PILOT EXPERIENCE IN HOURS											
ITEM		ITEM		ITEM		ITEM		ITEM		ITEM	
11. ALL MODELS		810.		17. CV LANDINGS DAY/NIGHT		ALL		16		/	
12. ALL MODELS IN LAST 12 MONTHS		562.1		18. FCLP LANDINGS LAST 6 MONTHS DAY/NIGHT		ALL		8		/	
13. ALL MODELS IN LAST 3 MONTHS		170.6		19. INSTRUMENT HOURS LAST 3 MONTHS ACTUAL/SIMULATED		ALL		0		/ 0	
14. ALL SERIES THIS MODEL		A/C 640.5		20. NIGHT HOURS LAST 3 MONTHS		ALL		0		/ 0	
15. ALL SERIES THIS MODEL LAST 12 MONTHS		A/C 520.4		21. TOTAL HOURS IN JETS (if jet mishap) HELON (if helo mishap)		ALL		1.7		/ 1.28	
16. ALL SERIES THIS MODEL LAST 3 MONTHS		A/C 170.6		22. LAST PRIOR FLIGHT ALL SERIES THIS MODEL		ALL		4.5		/ 4.5	
23. DATE/GRADE LAST NATOPS STANDARDIZATION CHECK		14 FEB 1968/QUAL		24. TYPE INSTRUMENT CARD		DATE		10 MAR 1968		DURATION	
25. NAME (Last, first & middle initial)		STAN		26. NAME (Last, first & middle initial)		27. NAME (Last, first & middle initial)		28. NAME (Last, first & middle initial)		29. NAME (Last, first & middle initial)	

OF 08

PART II MAINTENANCE, MATERIAL AND FACILITIES DATA										
A. A/C HISTORY	1. DATE OF MANUFACTURE	2. FLIGHT HRS. SINCE ACCEPTANCE	3. NO. OF PAR/OVERHAUL	4. MONTHS SINCE LAST PAR/OVERHAUL	5. FLT. HRS. SINCE LAST PAR/OVERHAUL	6. LAST PAR/OVERHAUL ACTIVITY	7. TYPE OF LAST CHECK PERFORMED	8. FLIGHT HOURS SINCE LAST CHECK	9. DAYS SINCE LAST CHECK	
	10/3-/55	6611.5	3	25	1581.3	O&R ENCL A	CALENDAR EVEN	156.1	29 DEC 67 (72)	
B. ENGINE HISTORY	1. ENGINE MODEL	2. ENGINE SERIAL NUMBER	3. FLIGHT HRS. SINCE ACCEPTANCE	4. NUMBER OF OVERHAULS	5. WAS DIR REQUESTED?	6. FLT. HRS. SINCE LAST OVERHAUL	7. LAST OVERHAUL ACTIVITY	8. TYPE OF LAST CHECK PERFORMED	9. FLIGHT HOURS SINCE LAST CHECK	10. DAYS SINCE LAST CHECK
	R1820 86A	BL520 0013	5729.9	2	NO	607.7	O&R ENCL A	CALENDAR	156.1	(72)
	(2)									
	(3)									
	(4)									
C. COMPONENT HISTORY	1. COMPONENT INVOLVED NOMENCLATURE	2. MANUFACTURERS PART NUMBER	3. TOTAL HRS. ON PART	4. NO. OF OVERHAULS	5. HOURS SINCE LAST OVERHAUL	6. OVERHAUL ACTIVITY	7. WAS DIR REQUESTED?	8. SER. NO. FUR/AMPEUR		
	(1)									
	(2)									
	(3)									
	(4)									
D. INCIDENTS & GROUND ACCIDENTS #	1. PARTS REPAIRED		3. DIRECT MANHOURS INVOLVED		2. PARTS REPLACED					
	PART NUMBER	NOMENCLATURE	PART NUMBER	NOMENCLATURE						
E. ENGINE FAILURES	JET ENGINE FLAMEOUT (Include intentional securing to prevent engine damage)									
	AT TIME OF FLAMEOUT	1. ALTITUDE	2. IAS	3. RPM	4. EGT	5. MANEUVER AT TIME OF FLAMEOUT	6. FUEL FLOW	7. ALTITUDE		
	8. G FORCES	9. RELIGHT	10. ALTITUDE		11. IAS	12. MAX EGT	13. FUEL CONTROL	14. NO. RELIGHT ATTEMPTS		
		<input type="checkbox"/> ATTEMPTED <input type="checkbox"/> ACCOMPLISHED					<input type="checkbox"/> PRIMARY <input type="checkbox"/> MANUAL			
	INTENTIONAL SECURE	15. ENGINE SYMPTOMS			16. CAUSE OF SYMPTOMS					
RECIPROCATING ENGINE FAILURE										
	17. ALTITUDE	18. IAS	19. ALTITUDE	20. RPM	21. MAP	22. TORQUE/IMEP	23. FUEL FLOW PRESSURE	24. OIL PRESSURE		
	INTENTIONAL SECURE	25. ENGINE SYMPTOMS			26. CAUSE OF SYMPTOMS					
F. OTHER REPORT	IDENTIFY OTHER REPORTS CONCERNING THIS MISHAP									
	1. AMPEUR SERIAL NUMBER <u>N/A</u>									
	2. DIR MESSAGE REQUEST DATE-TIME-GROUP <u>N/A</u>									
	3. OTHER <u>PRELIMINARY MSC REP 110600Z MAR 68, SUPPLEMENTARY MSG, REP #1 112350Z</u>									

AIRCRAFT ACCIDENT REPORT

OPNAV FORM 3750-1A (Rev. 3-63) Page 1

SPECIAL HANDLING REQUIRED as accordance with

OPNAV REPORT 3750-1

Para. 46, OPNAV INSTRUCTION 3750.5, 1st edition

1. EQUIPMENT INVOLVED <input type="checkbox"/> CATAPULT <input type="checkbox"/> ARRESTING GEAR		2. PRESSURE SETTINGS		3. WIND OVER DECK		4. RELATIVE WIND		5. APPROACH/END SPEED	
6. MARK NUMBER		7. MODEL NUMBER		8. LOCATION OF MISHAP		9. LAUNCHING BRIDGE AND BRIDLE ARRESTER			
10. CATAPULT/ARRESTING GEAR RULING OF NONCOMPLIANCE USED									
11. This portion shall be completed whenever (1) an aircraft accident involves arresting gear barrier and/or barricade equipment, or (2) an aircraft accident involves malfunctioning of arresting gear, barrier and/or barricade equipment. Incidents or routine damage to cables, weldings and other expendable equipment need not be reported herein.									
12. ENGAGED		13. DECK RUNOUT (FEET)		14. RAM TRAVEL (INCHES)		15. CONTROL VALVE SETTINGS CONSTANT PRESSURE DOMESTIC (P.S.I.)		16. CONSTANT RUMOUT (INT. LBS.)	
17. ACCUMULATOR PRESSURE (PSI)		18. COMMENTS (for cable failures specify no. landings and months in service)							
DECK PENDANT									
DECK PENDANT									
BARRIER/ BARRICADE									
FOR ACCIDENTS ABOARD CARRIERS (complete on pilot)									
1. DATE DEPLOYED COMMS		2. DAY HOURS/LANDINGS SINCE DEPLOYMENT				3. DAY HOURS/LANDING LAST 30 DAYS			
4. NO. DAYS OPERATING PERIOD		5. NIGHT HOURS/LANDINGS SINCE DEPLOYMENT				6. NIGHT HOURS/LANDINGS LAST 30 DAYS			
7. INST. HOURS LOGGED SINCE DEPLOYMENT ACTUAL/SIMULATED									
WEATHER AT SCENE OF MISHAP									
1. CEILING		2. VISIBILITY		3. RELATIVE WIND DIRECTION AND VELOCITY		4. TEMPERATURE RUNWAY OUTSIDE AIR		5. DEW POINT	
XM20		3P		170/10		70°F		63°F	
6. ALTITUDE? SETTING		29.79							
7. OTHER WEATHER CONDITIONS (winds aloft, icing level, sea state, density altitude, as appropriate)									

PART II ADDITIONAL INFORMATION			
PART	SECTION	ITEM	REMARKS
1. COPY DISTRIBUTION			
2CC NAVJAGSAFEON DIRECT (MAR)			
1CC BUERS DIRECT (MAR)			
1CC N. V. AIRSYS COM			
1CC CN. TRA (404)			
1CC CN. B. TRA			
1CC N. V. L. NTREP			
COLUMBUS			
COST DAMAGE TO:			
3. GOVERNMENT PROPERTY			
4. PRIVATE PROPERTY			
5. DATE SUBMITTED TO CC			
28 March 1968			

(b) (6)		SIGNATURES OF THE BOARD		(b) (6)	
ASSISTANT MAINTENANCE OFFICER		UNIT BILLET		USMC	
(b) (6)		UNIT BILLET		USMC	
LT MC, USMC		UNIT BILLET		USMC	

12. When preparing Incident and Ground Accident reports, items indicated by an asterisk in the upper right hand corner must be filled in. Other items considered appropriate should also be filled in.

PART V - THE ACCIDENT

On Sunday 10 March 1968, LTJG Nicholas A. HARRIS, (b) (6) USNR was the instructor chase pilot in company with two student solo aircraft on a syllabus day navigation training flight. The flight of three T-28 aircraft departed Pope AFB at 1629R on a VFR flight plan to NAS Whiting Field. LTJG HARRIS was the pilot of 2W-216 BuNo 138348.

The flight proceeded normally until near Dothan, Alabama, when LTJG HARRIS instructed his students to increase their power settings to 2400 RPM and 33-34 inches M.P. and assigned headings for the lead aircraft to fly. At this point, the students ceased to navigate and flew headings as assigned by LTJG HARRIS.

Approaching a cloud layer, LTJG HARRIS instructed the flight to start a cruise descent from 4500 feet to 1500 feet. During this descent, the flight passed over the leading edge of a cloud layer. The flight was then directed to make a descending right hand 360 degree turn and return to its original heading.

The cloud layer or fog bank proved to be lower than anticipated so the lead student found it necessary to descend below the previously assigned altitude in order to remain VFR. The flight continued descending to approximately 300 feet indicated when the student wingman broke formation and started to climb. Shortly thereafter the lead student started a climb through the

fog bank. Both students regained VFR conditions on top at 2000-2500 feet and identified each other by radio. Each attempted to contact LTJG HARRIS without response.

LTJG HARRIS was flying in the port wing position of the lead aircraft (number 3 position in the flight) when the flight entered marginal weather. No further radio transmissions were received from LTJG HARRIS and visual contact was lost with his aircraft at that time.

The aircraft crashed approximately 1830S 10 March 1968. It was reported missing at 1855S 10 March 1968. The wreckage was discovered by Forest Service personnel and reported to Naval Authorities at 1325S, 11 March 1968. The aircraft disintegrated and burned on impact.

Page 5

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6
SERIES

PART VI DAMAGE TO AIRCRAFT

Aircraft 2W-216. BuNo 138348 received strike damage upon impact with the ground.

Engine Section. The engine was separated from the airframe on impact and burned. Two propeller blades broke off, coming to rest on top of the main wreckage.

Wings. The port wing separated from the aircraft on impact and broke into several parts. The starboard wing exploded on impact.

Fuselage. Empennage was partially consumed by fire and compressed on top of cockpit and forward fuselage which were both burned. Refer to enclosures (9,10, & 11).

PART VII - INVESTIGATION AND ANALYSIS

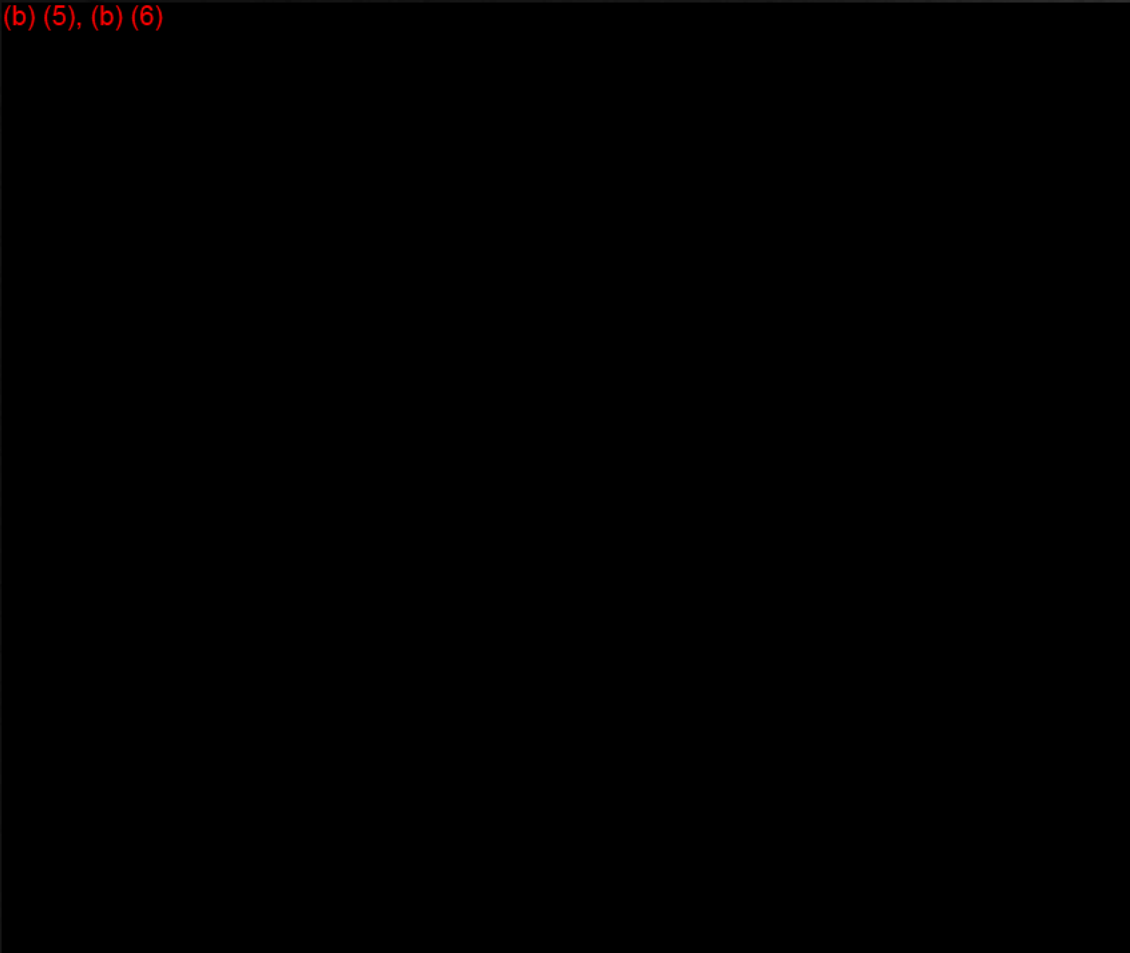
On Friday, 8 March 1968 LTJG HARRIS and LTJG (b) (6) each accompanied two student solos on a syllabus day navigation training flight from NAS Whiting Field to Pope AFB, Fayetteville, North Carolina. The flight and arrival were uneventful. That evening, the two instructor pilots continued on to NAS Willow Grove, Pa. LTJG HARRIS requested one of his students, ENS (b) (6) (b) (6) to accompany him as his co-pilot. The remaining three students stayed at Pope as LTJG (b) (6) already had brought a co-pilot with him from Whiting. This flight, although filed IFR was conducted under VFR conditions, and terminated at NAS Willow Grove.

On Sunday 10 March, the weather along the route from NAS Willow Grove to Pope AFB was IFR. LTJG (b) (6) experienced some maintenance difficulties which delayed his departure. Therefore, LTJG HARRIS preceded LTJG (b) (6) and arrived at Pope AFB about 1214Z with LTJG (b) (6) arriving about two hours later. Both had filed IFR flight plans in IFR conditions for this flight. LTJG HARRIS had all the students briefed and ready for the return trip to NAS Whiting Field when LTJG (b) (6) arrived, but IFR weather at Pope prevented their departure.

They were informed by the weather forecaster at Pope AFB about 1400Z that the local adverse weather ended several miles west

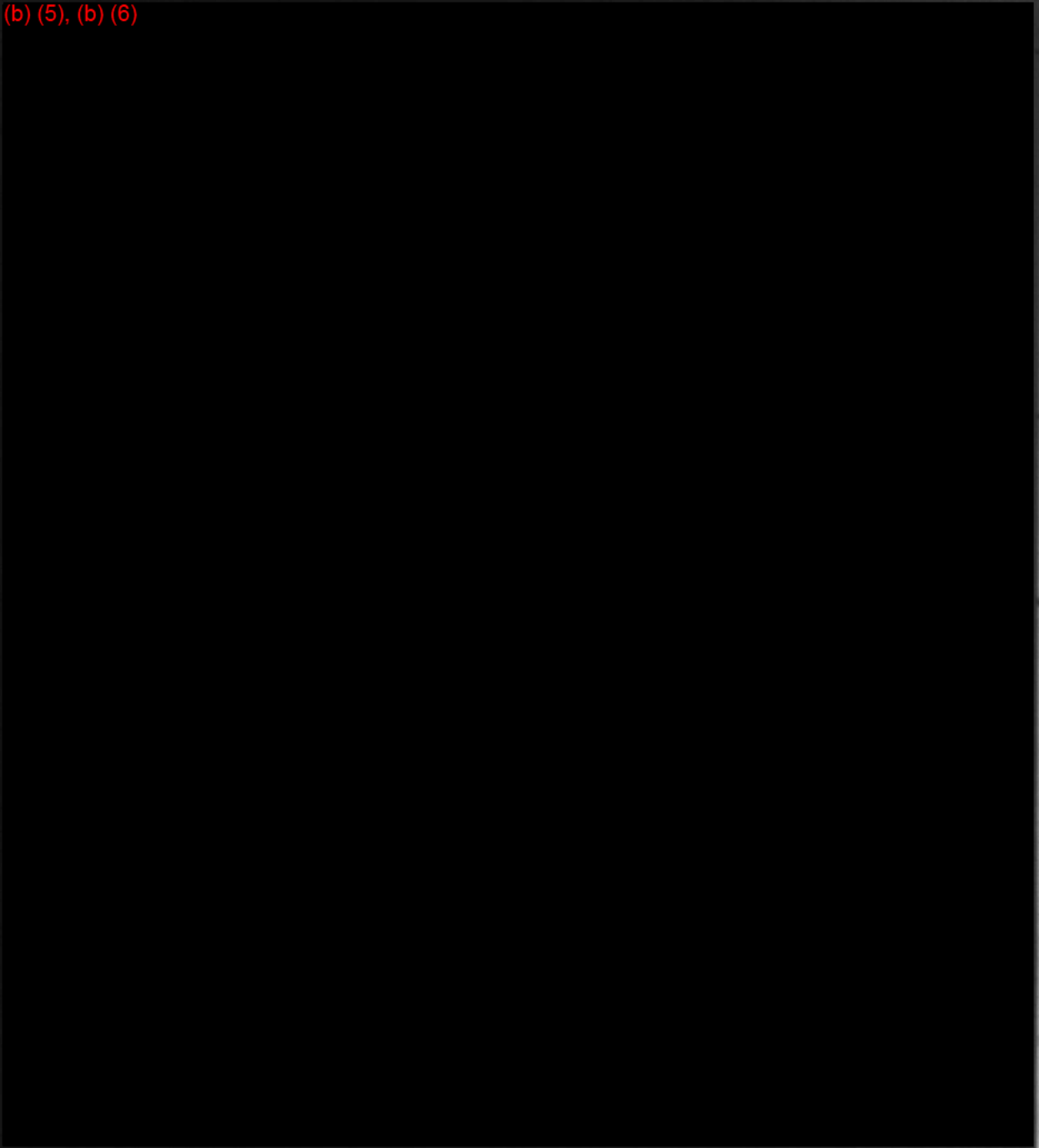
of Pope and that their weather enroute and at MAAS Whiting Field (NSE) should be VFR until 1645 S. The forecast winds at this time were 25 KAS from 220° (headwind) at 1500 to 2000 feet southwest to NSE. The weather at Pope was still IFR about 1420R so the decision was made to ROP. At 1545R, while returning to their aircraft for their gear, the weather improved to VFR conditions.

(b) (5), (b) (6)



SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6
SERIES

(b) (5), (b) (6)



SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OFNAVINST 3750.6
SERIES

(b) (5)



SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPMVINST 3750.6

SERIES

(b) (5)

2W-216 struck the ground in a steep right turn. This was evidenced at the crash site by the discovery of the starboard running light glass at the initial point of impact. An undamaged tree five feet west of initial contact point indicated 2W-216 final flight attitude was very near a 90° angle of bank. The starboard wing tip accordioned about 15° back from the leading edge and 55° up from the bottom to the leading edge, indicating the aircraft was rolling rapidly to the right with a forward component upon impact. All of the wreckage was strewn $10-20^{\circ}$ left of the line of the initial 25' ground scar. DIR of the attitude gyro indicated that it was operating at time of impact and there were "G" forces on the aircraft. The DIR also suggested a nose up attitude, however, damage to the gyro precluded a conclusive determination. A tree, 20' from initial impact with broken branches about 40' up, was believed to have been struck by the port wing (Enclosure 8) An elongated bulb filament in the vertical stabilizer running light indicates it was lighted on impact, thus eliminating the probability of an electrical failure.

(b) (5)

Page 11

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6
SERIES.

(b) (5)

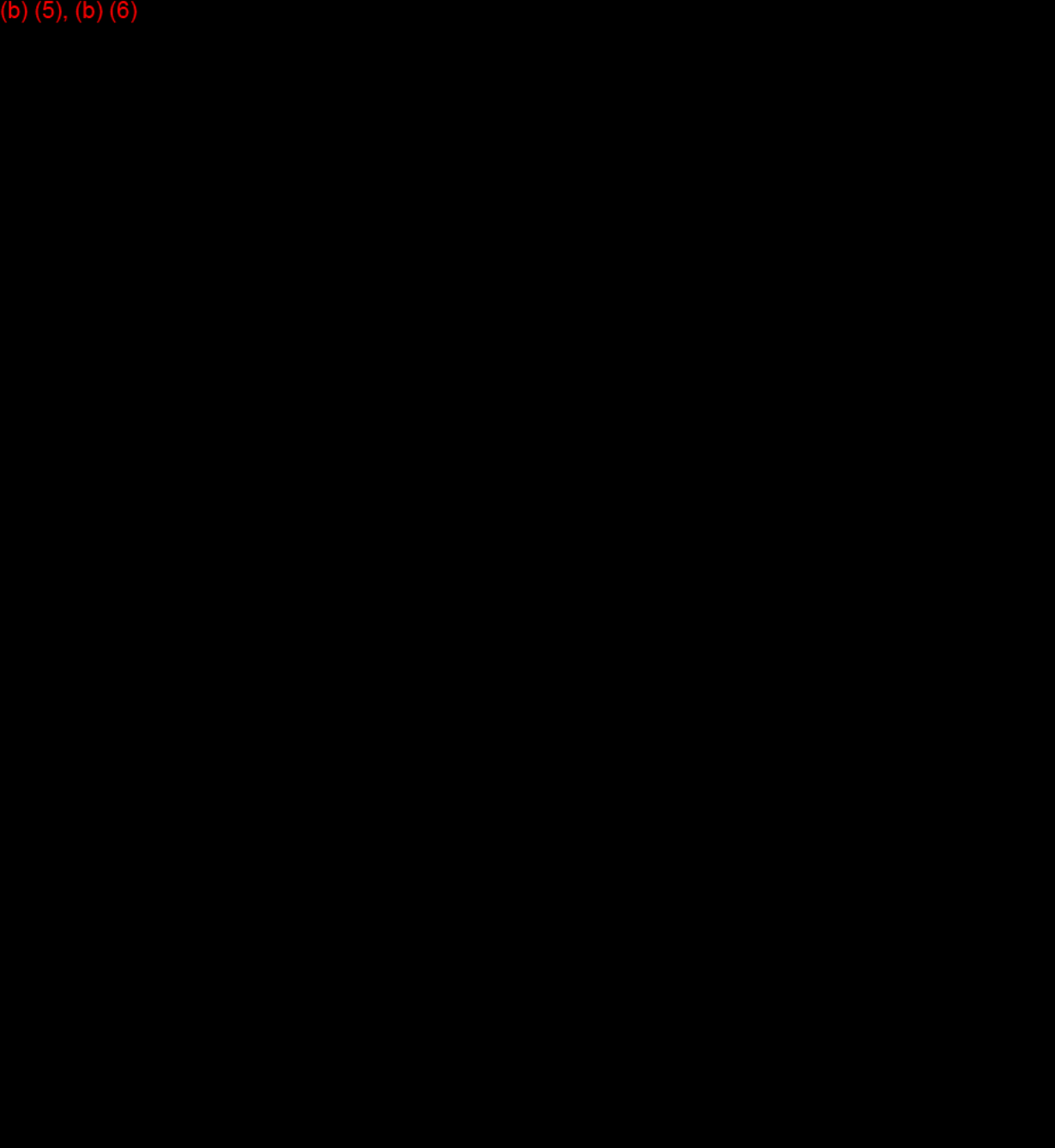
The ground scar indicated the starboard (down) wing dragged along the ground for about five feet while the aircraft continued to roll to the right (Enclosure 9). A 16 by 19 foot crater, five feet deep, was created by the engine and airframe (Enclosure 10). The engine and airframe separated on impact. The airframe, less the port wing, compressed and stopped its forward movement six feet beyond the crater (Enclosure 11). The inertia and gyroscopic effect of the engine propelled it from the crater. The engine came to rest on top of the main wreckage with one intact propeller/blade which made a scar in the UHF antenna housing on the vertical stabilizer.

The aircraft, 2W-216, was reported missing at 1855S and a search was initiated. The search was hampered by adverse weather conditions but Forest Service Personnel finally located the wreckage and informed Naval authorities at 1325S on 11 March 1968.

The body of the pilot was found with the wreckage. No attempt to aggress was indicated.

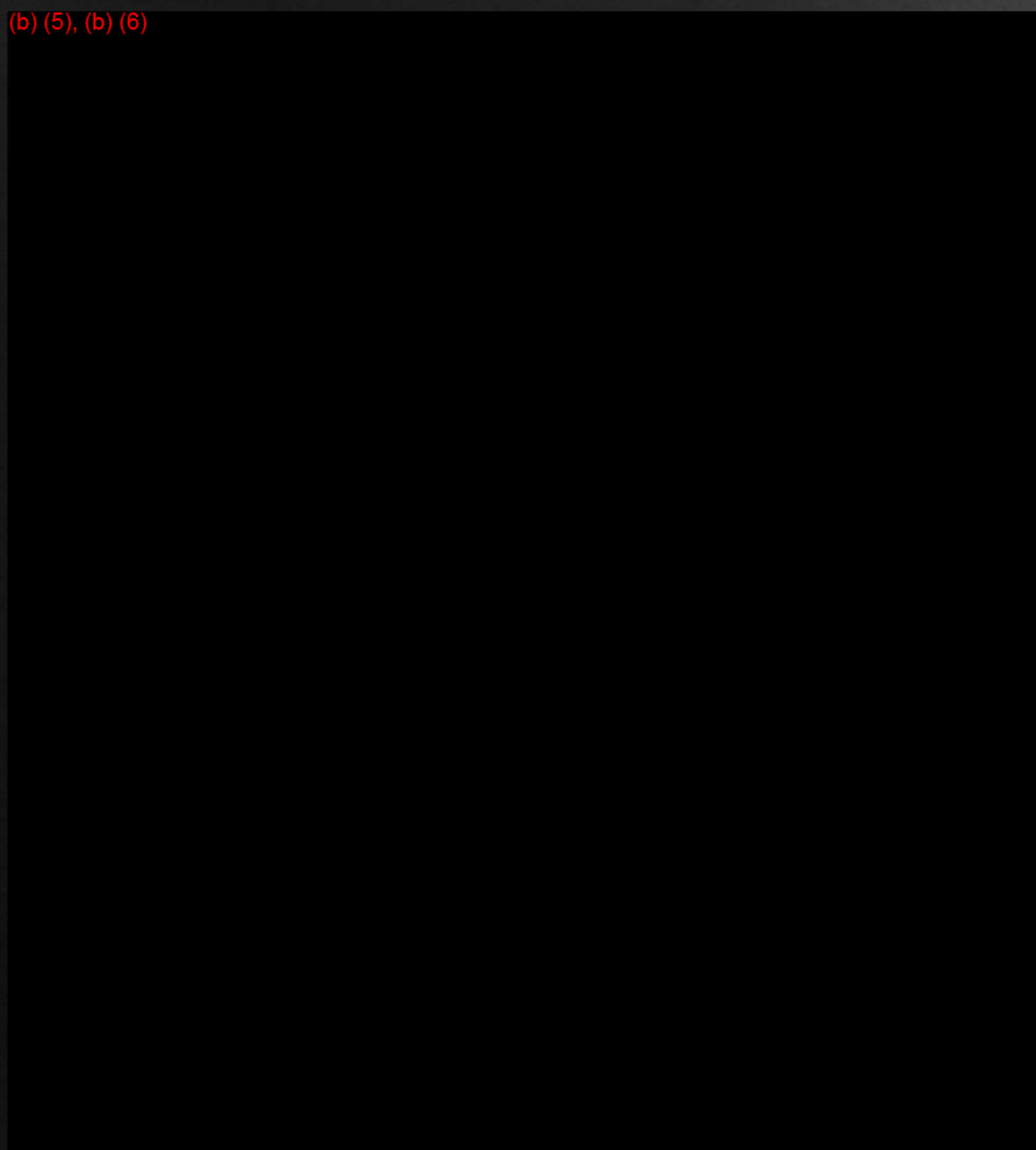
(b) (5)

(b) (5), (b) (6)



SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6
SERIES.

(b) (5), (b) (6)

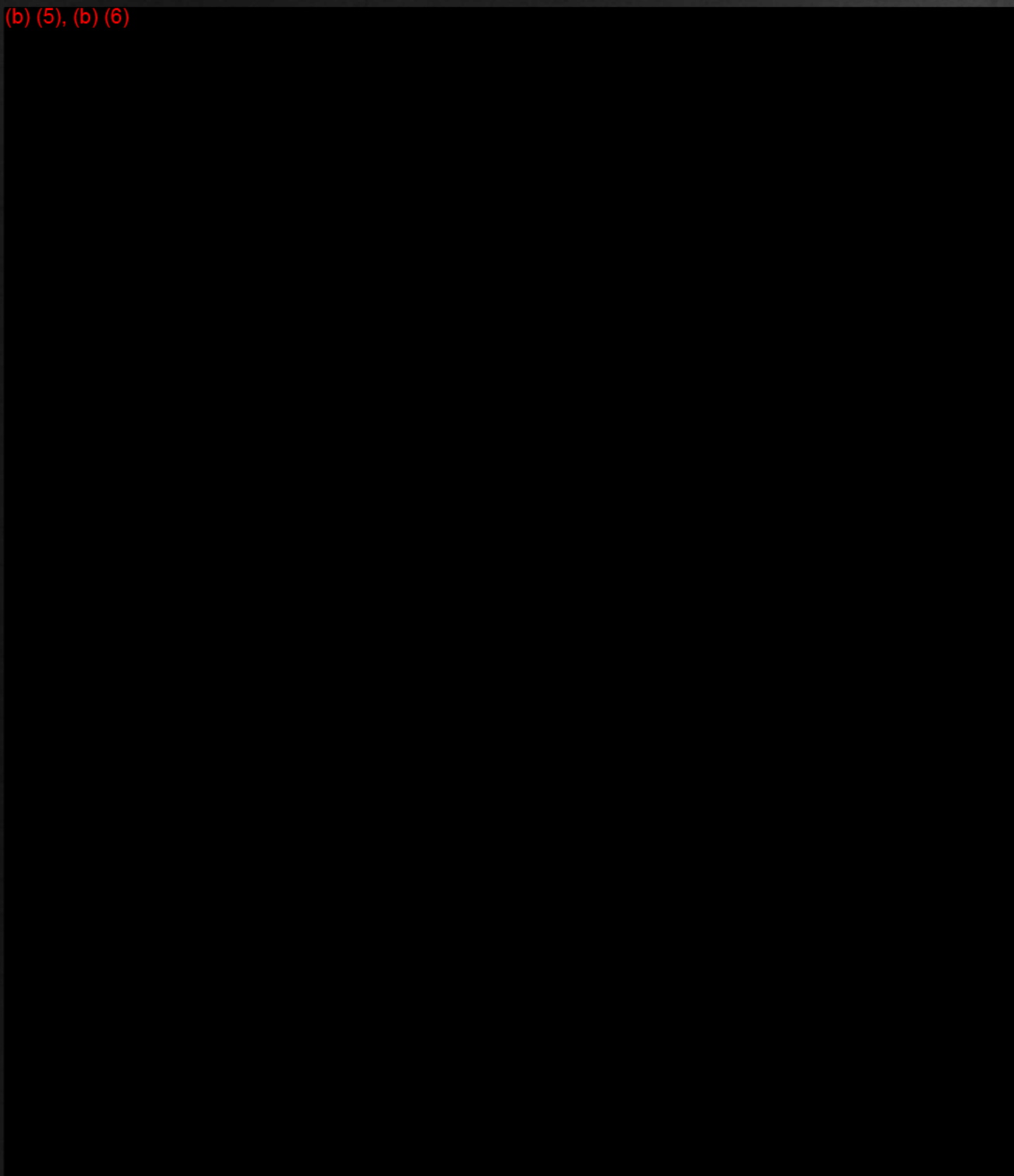


SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6

SERIES



(b) (5), (b) (6)



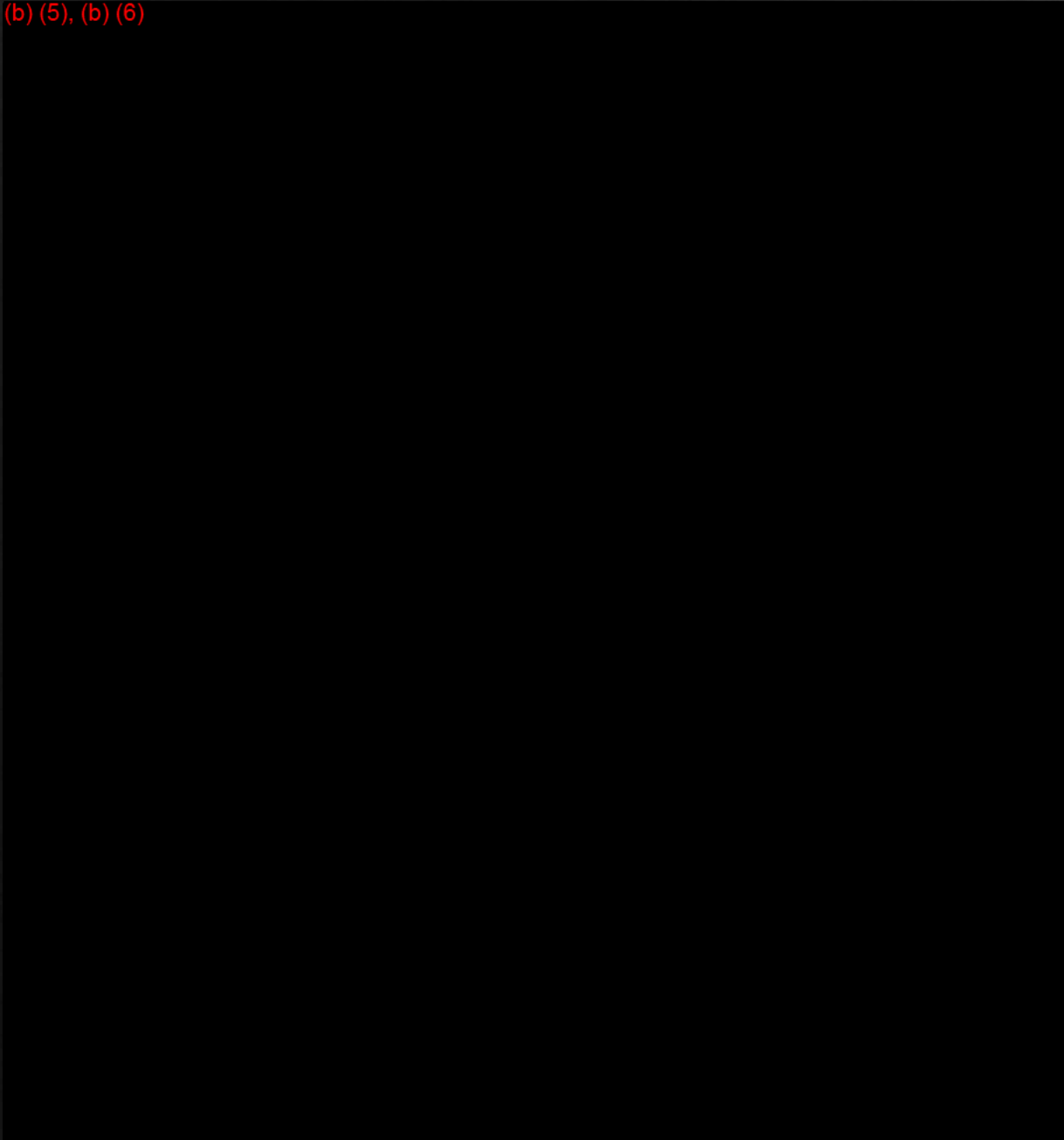
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6
SERIES.

(b) (5)



SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPMVINST 3750.6
SERIES.

(b) (5), (b) (6)



Page 17

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OFFAVINST 3750.6
SERIES.

(b) (5)

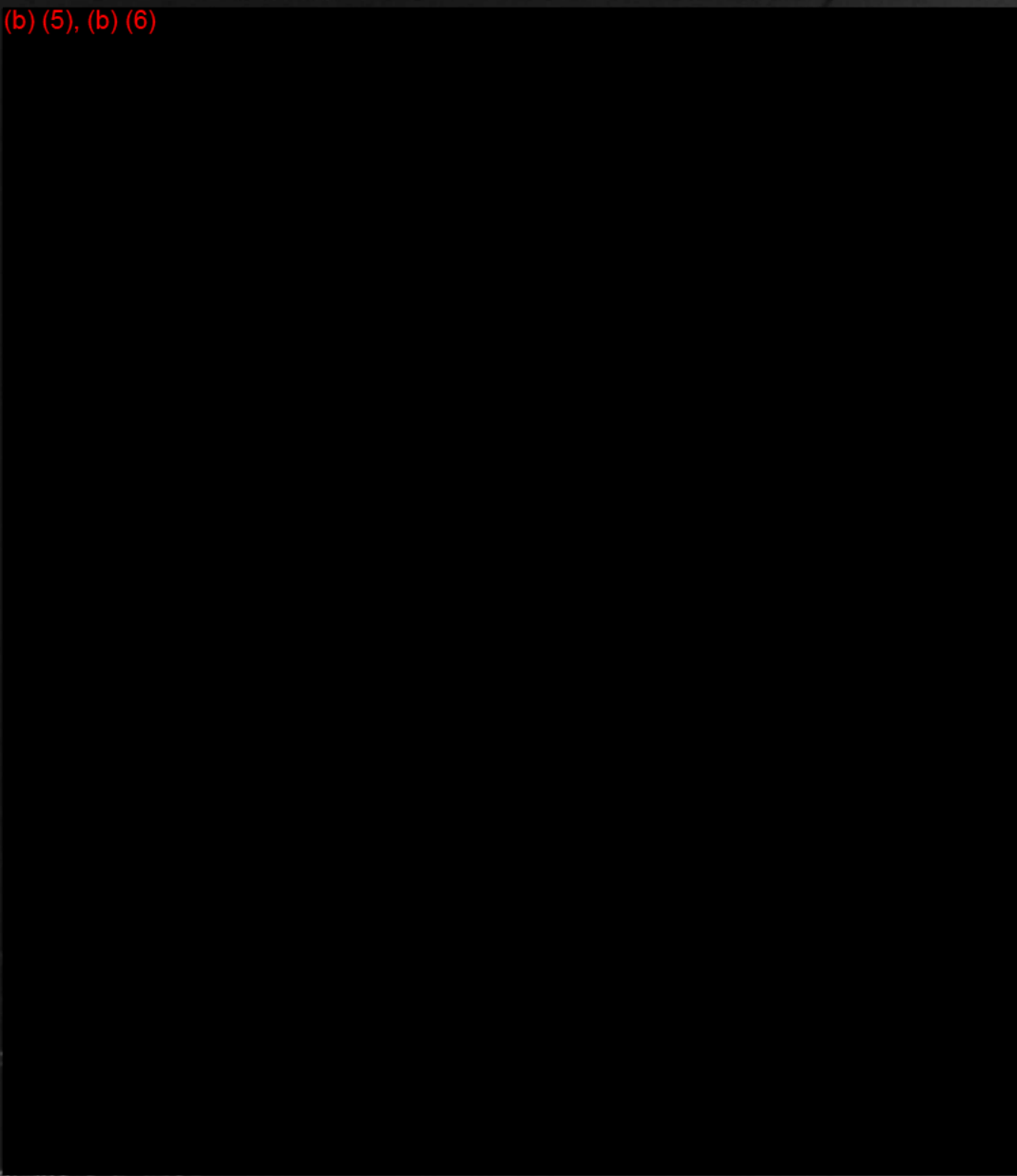


Page 18

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6
SERIES.

PART VIII CONCLUSIONS

(b) (5), (b) (6)



SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPM/VINST 3750.6
SERIES.

(b) (5)



Page 20

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6
SERIES.

PART IX RECOMMENDATIONS

(b) (5)



Page 21

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPM/VINST 3750.6
SERIES.